

# Photometric Details

SW24-6.0\_DRY\_20



<b>Product name:</b> SW24-6.0_DRY_20	
<b>Date:</b> 12/5/2018	
<b>Powering product:</b> IQ-PH-80-120/24	
<hr/>	
<b>Output:</b>	414 lm/ft
<b>Peak:</b>	127 cd
<b>Power:</b>	6.1 W/ft
<b>PF:</b>	1.0



**Light efficiency:**



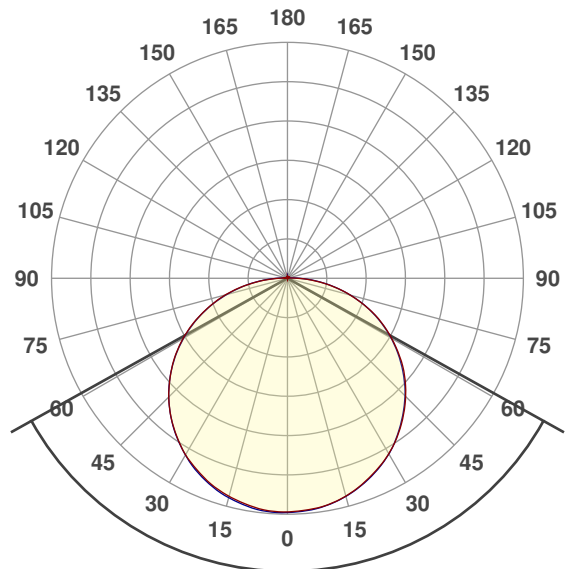
**Light quality:**



**Color temperature:**



## Beam Angle

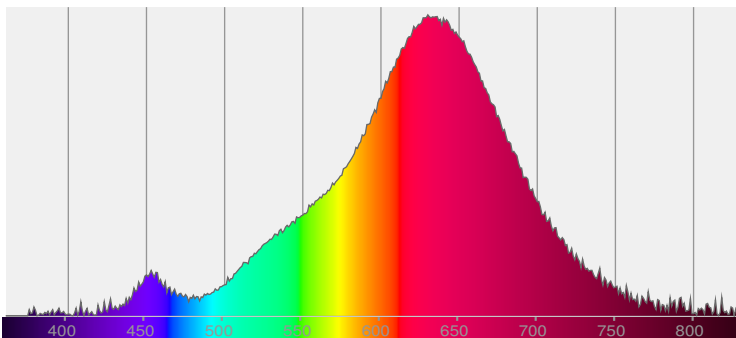


**121.8°**

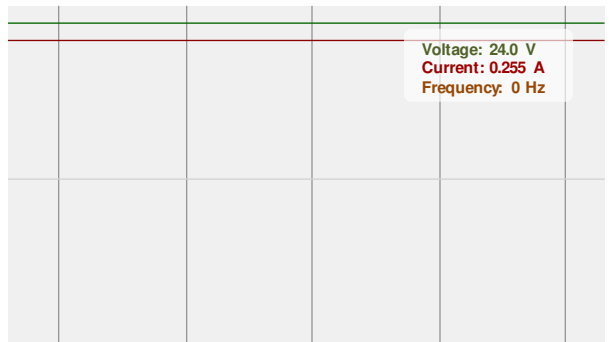


CIE 1931  
x: 0.522  
y: 0.405

## Spectra

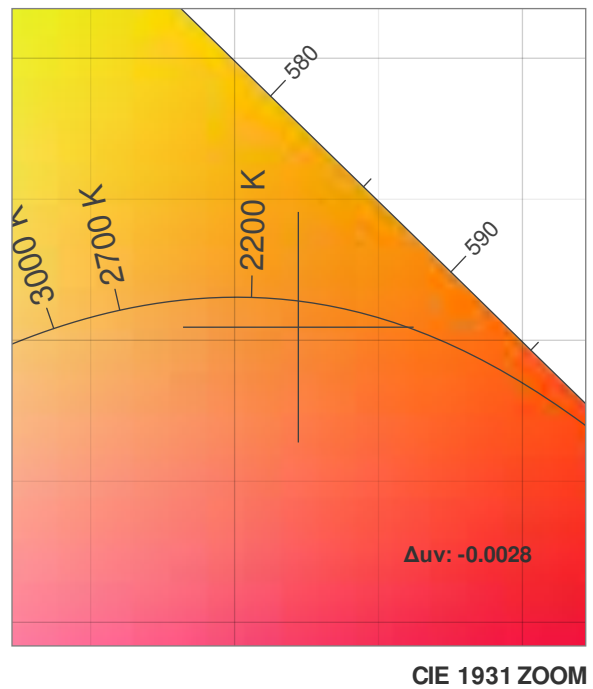
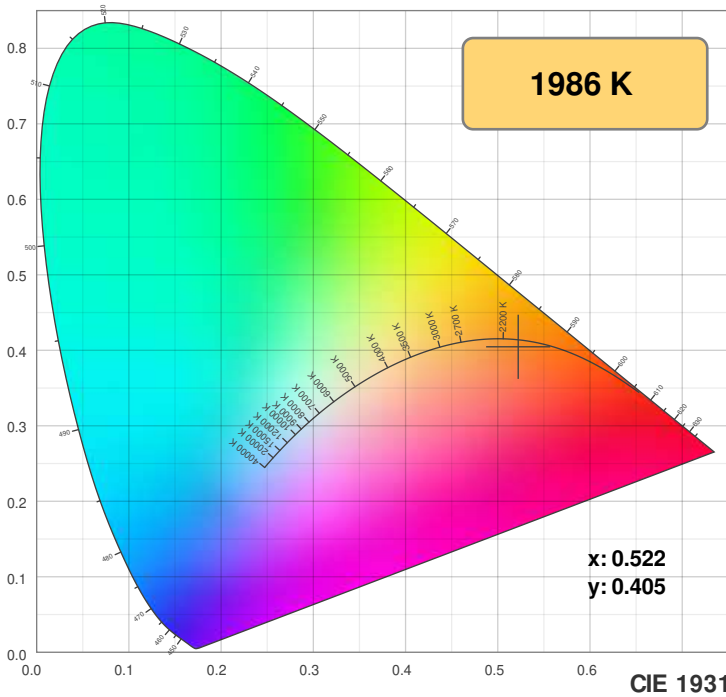


## Power

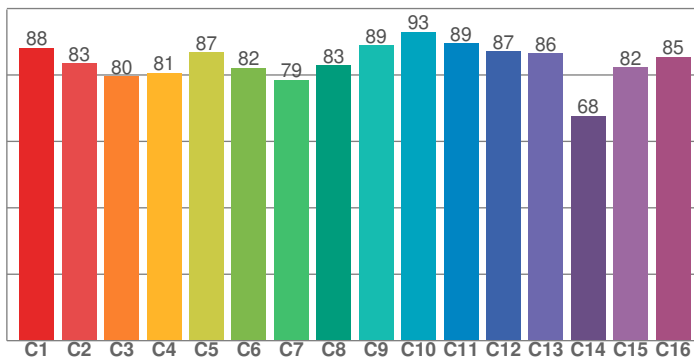


# Color Details

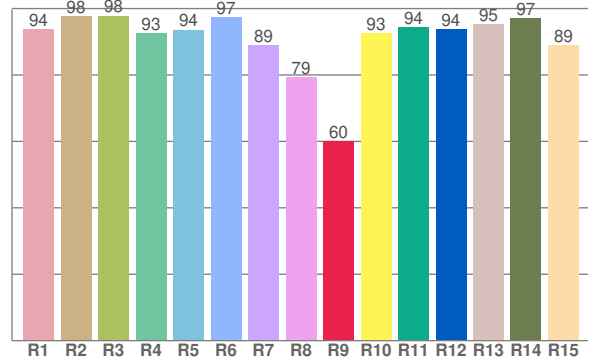
SW24-6.0\_DRY\_20



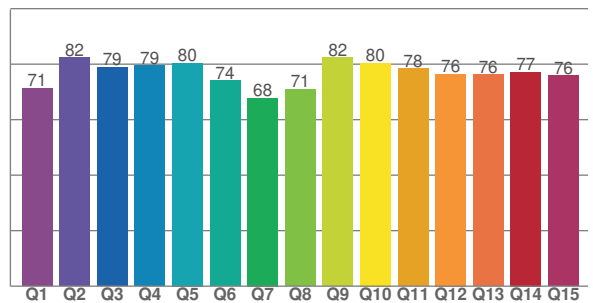
**TM30: 85.1**



**CRI: 92.6 (R1-R8)**



**CQS: 76.0**



CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
93.8	97.6	97.8	92.6	93.6	97.3	88.9	79.3	60.0	92.6	94.5	93.7	95.2	97.1	88.9

TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
88.1	83.5	79.6	80.6	86.8	82.1	78.6	82.9	88.9	93.0	89.5	87.1	86.5	67.7	82.3	85.5

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
71.3	82.4	78.9	79.5	80.4	74.1	67.8	71.0	82.4	80.4	78.3	76.4	76.2	77.1	76.0

## Color parameters

Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
1986 K	92.6	60.0	85.1	105.9	76.0	0.522	0.405	0.307	0.356	-0.0028

# TM30 Details

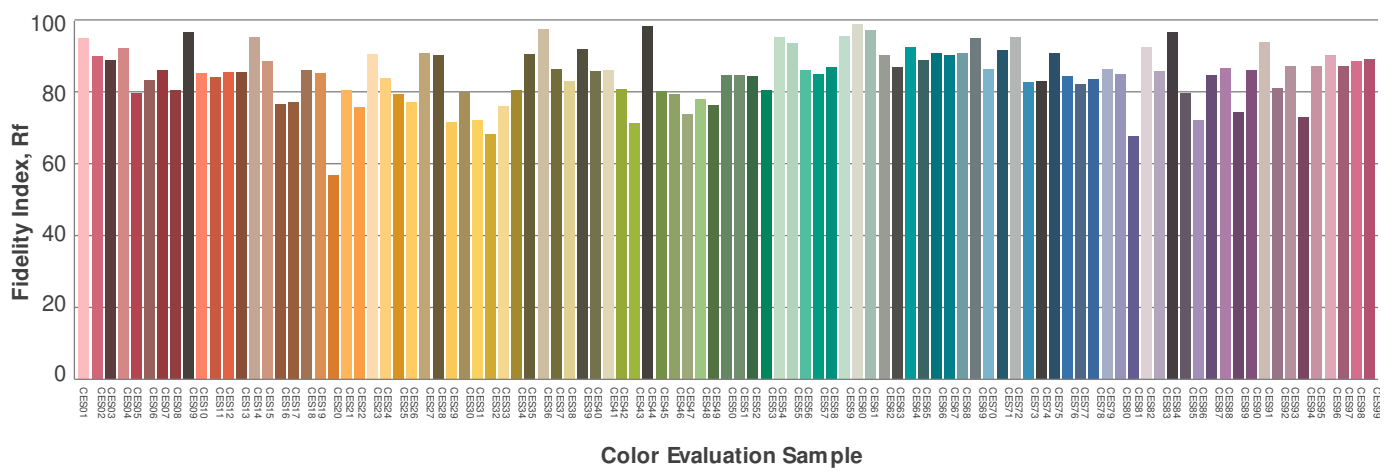
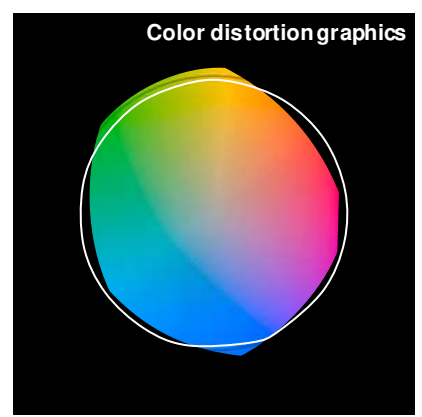
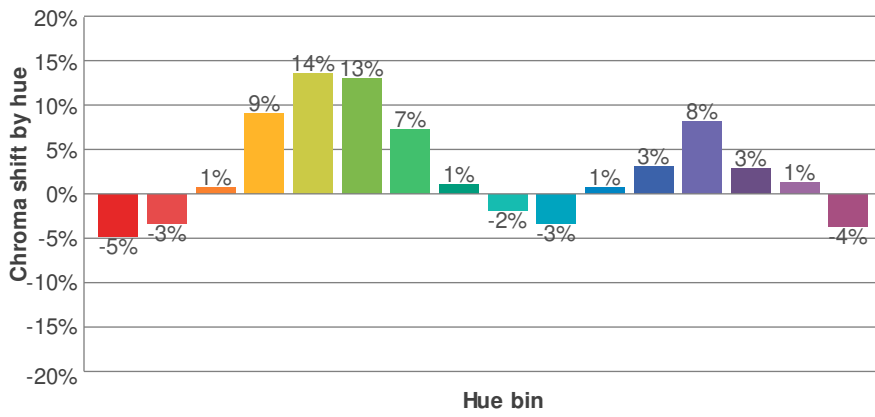
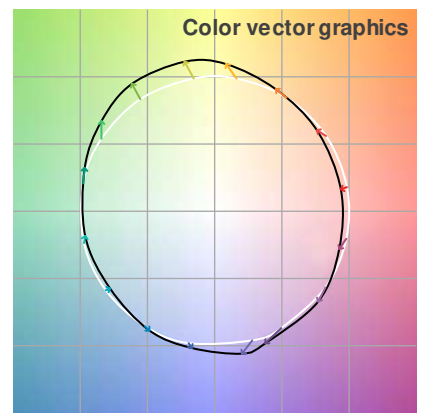
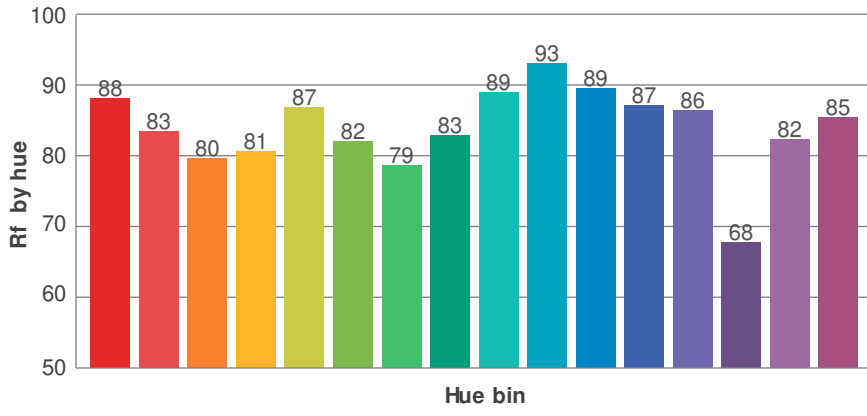
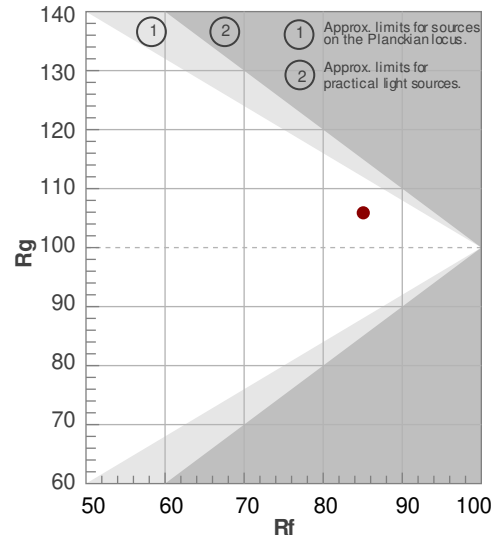
SW24-6.0\_DRY\_20



**Rf 85.1**  
Fidelity index Rf

**Rg 105.9**  
Gammut index Rg

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	88	-5%	-1%
2	83	-3%	7%
3	80	1%	10%
4	81	9%	10%
5	87	14%	4%
6	82	13%	-1%
7	79	7%	-11%
8	83	1%	-12%
9	89	-2%	-5%
10	93	-3%	1%
11	89	1%	5%
12	87	3%	3%
13	86	8%	-10%
14	68	3%	-16%
15	82	1%	-12%
16	85	-4%	-8%



# Photometric Details

SW24-6.0\_DRY\_24



<b>Product name:</b> SW24-6.0_DRY_24	
<b>Date:</b> 10/15/2018	
<b>Powering product:</b> IQ-PH-80-120/24	
<hr/>	
<b>Output:</b>	443 lm/ft
<b>Peak:</b>	136 cd
<b>Power:</b>	6.1 W/ft
<b>PF:</b>	1.0



Light efficiency:



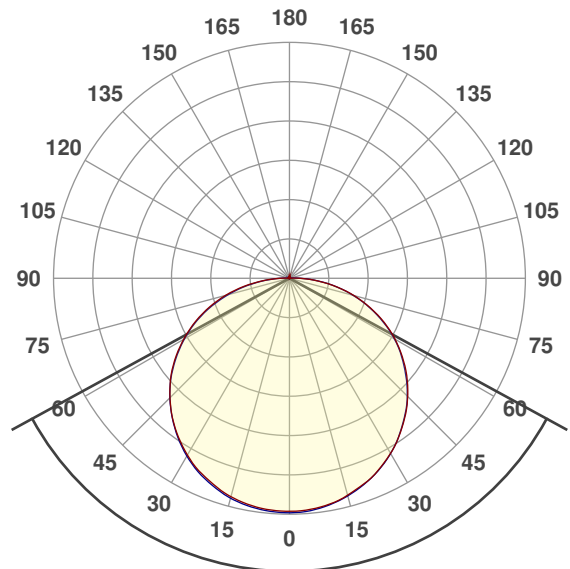
Light quality:



Color temperature:



## Beam Angle

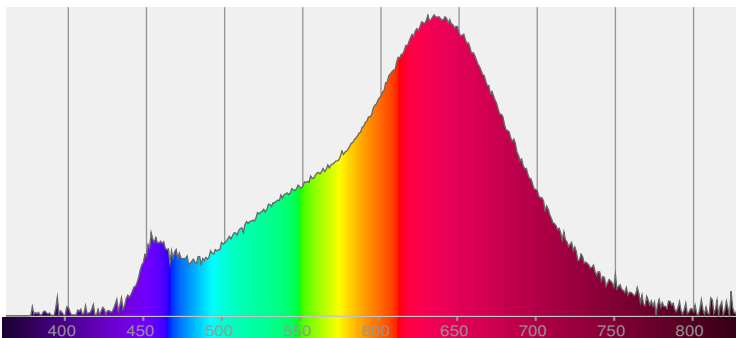


122.7°

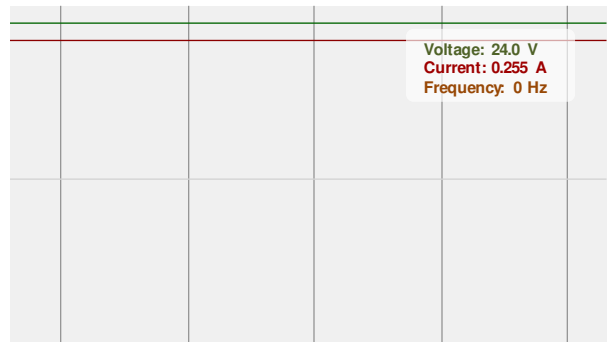


CIE 1931  
x: 0.477  
y: 0.404

## Spectra

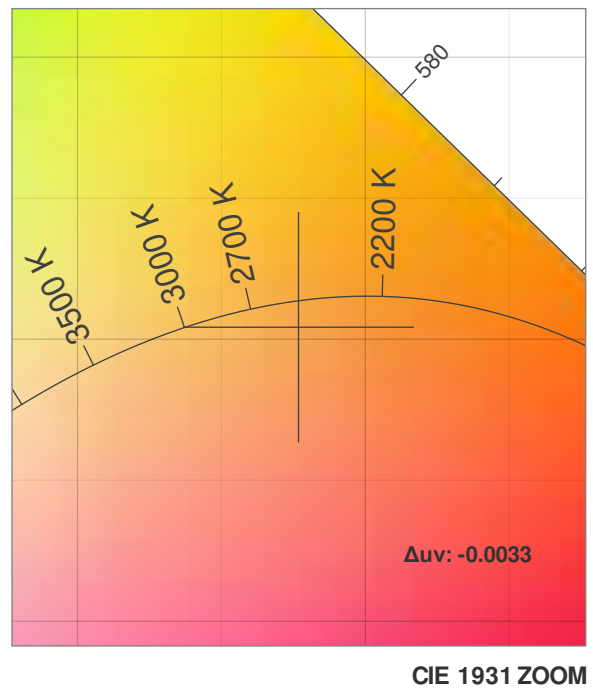
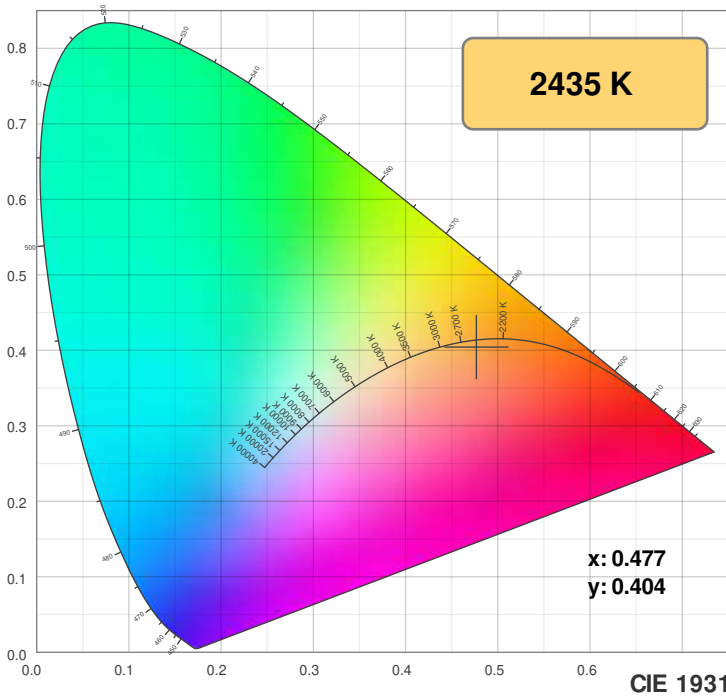


## Power

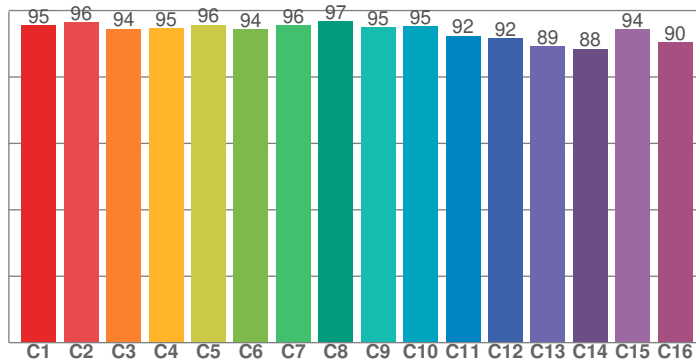


# Color Details

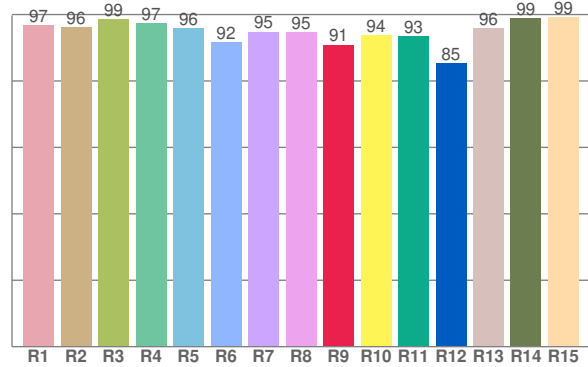
SW24-6.0\_DRY\_24



**TM30: 94.0**



**CRI: 95.7 (R1-R8)**



CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
96.7	96.3	98.5	97.4	95.8	91.6	94.8	94.7	90.9	93.8	93.3	85.3	95.8	98.8	99.2

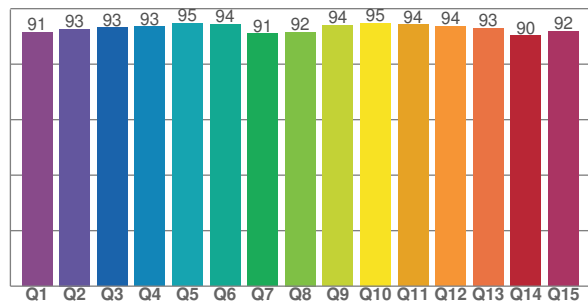
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
95.5	96.4	94.4	94.7	95.6	94.3	95.5	96.7	94.9	95.2	92.4	91.5	89.2	88.4	94.3	90.4

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
91.5	92.7	93.2	93.5	94.8	94.4	91.0	91.6	94.0	94.9	94.3	93.7	93.0	90.2	91.8

**CQS: 92.6**



## Color parameters

Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
2435 K	95.7	90.9	94.0	102.1	92.6	0.477	0.404	0.276	0.352	-0.0033

# TM30 Details

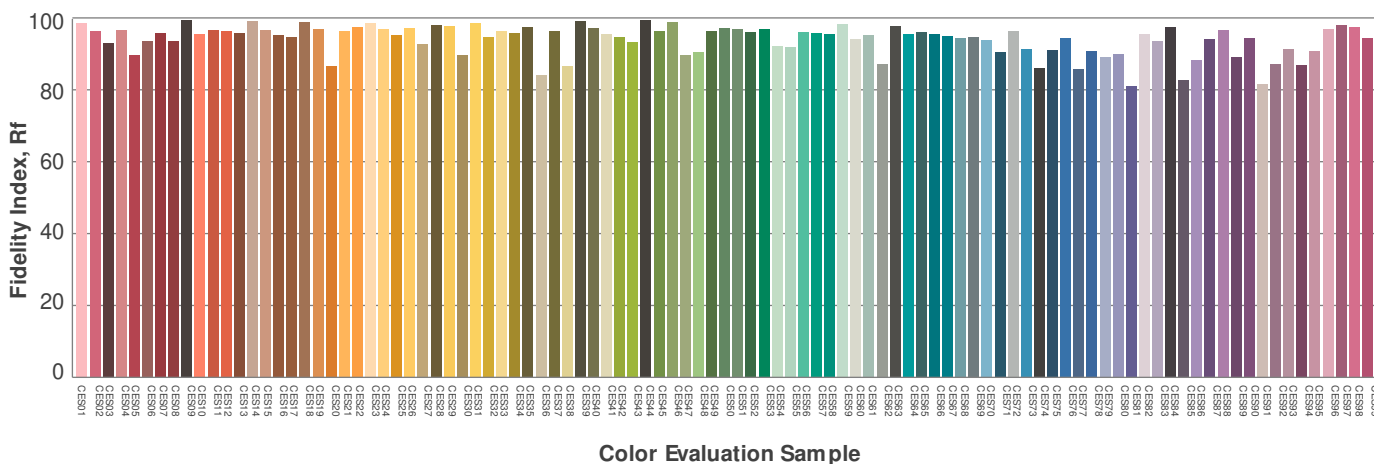
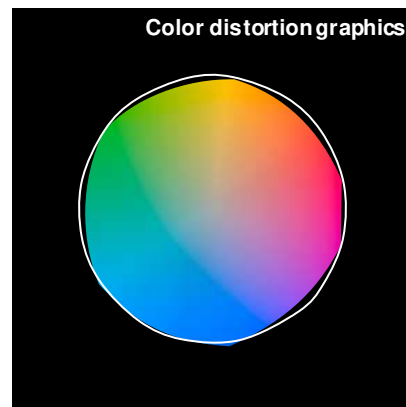
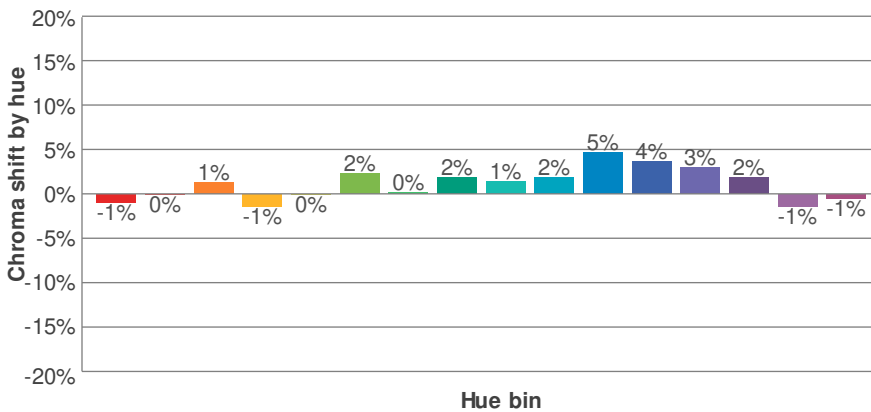
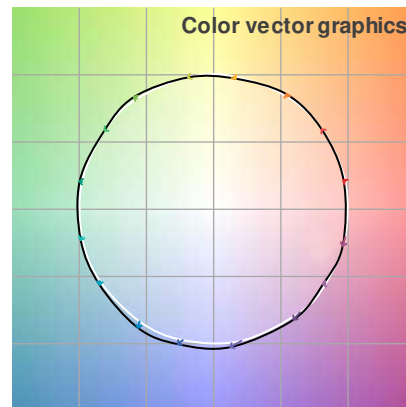
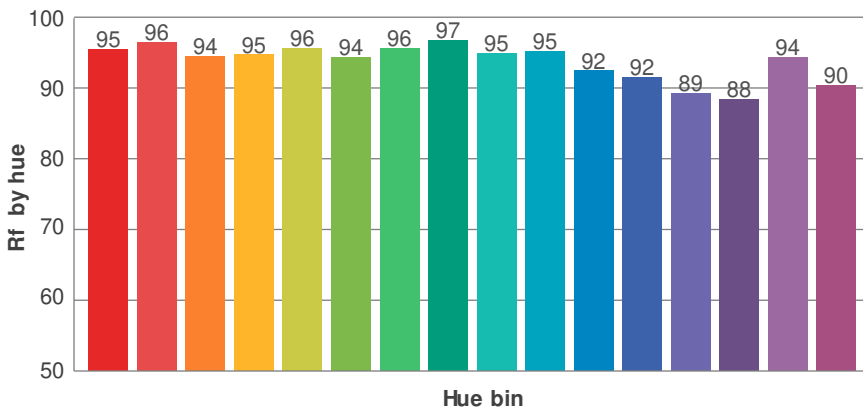
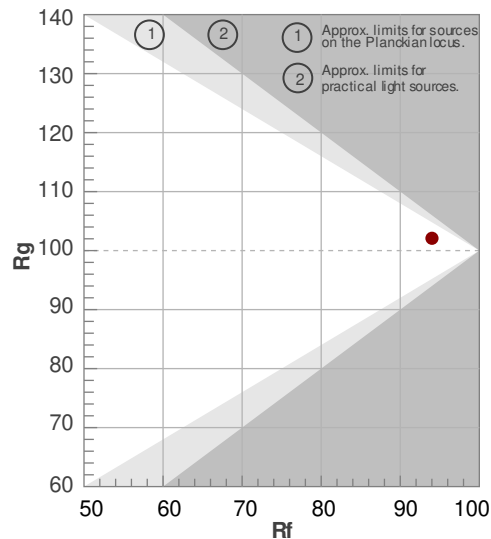
SW24-6.0\_DRY\_24



**Rf 94.0**  
Fidelity index Rf

**Rg 102.1**  
Gammut index Rg

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	95	-1%	1%
2	96	0%	1%
3	94	1%	1%
4	95	-1%	-2%
5	96	0%	1%
6	94	2%	1%
7	96	0%	1%
8	97	2%	0%
9	95	1%	2%
10	95	2%	2%
11	92	5%	2%
12	92	4%	-3%
13	89	3%	-9%
14	88	2%	-7%
15	94	-1%	-1%
16	90	-1%	-6%



# Photometric Details

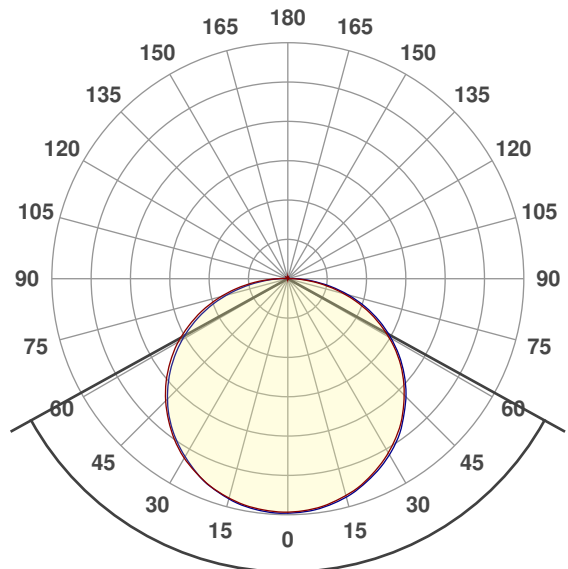
SW24-6.0\_DRY\_27



<b>Product name:</b> SW24-6.0_DRY_27	
<b>Date:</b> 2/22/2018	
<b>Powering product:</b> IQ-PH-80-120/24	
<hr/>	
<b>Output:</b>	461 lm/ft
<b>Peak:</b>	142 cd
<b>Power:</b>	6.1 W/ft
<b>PF:</b>	1.0



## Beam Angle



122.2°

CIE 1931  
x: 0.457  
y: 0.405



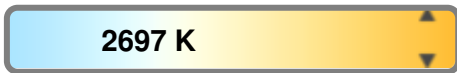
## Light efficiency:



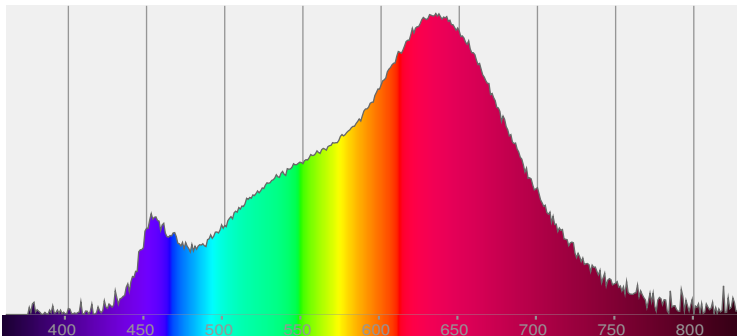
## Light quality:



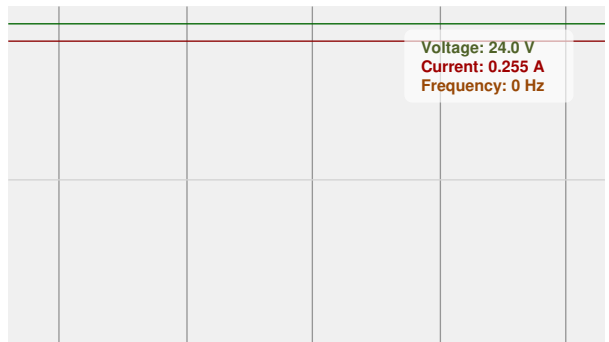
## Color temperature:



## Spectra

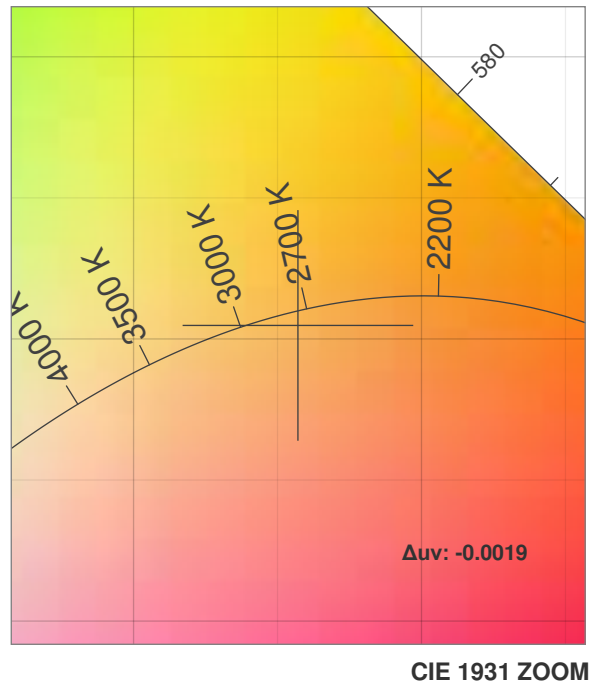
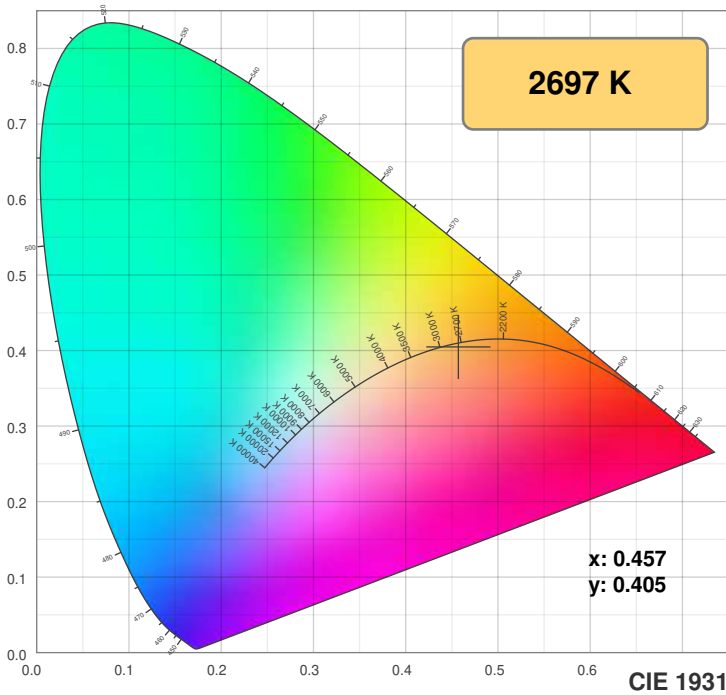


## Power

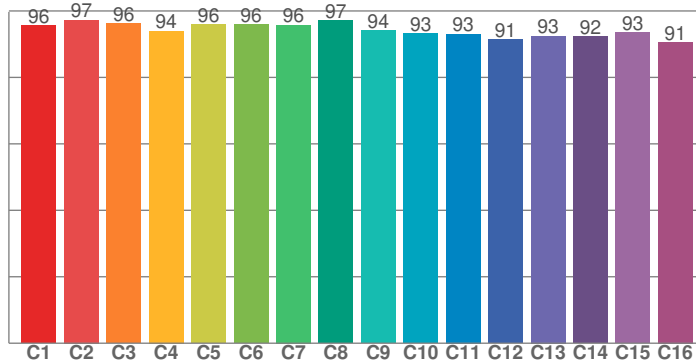


# Color Details

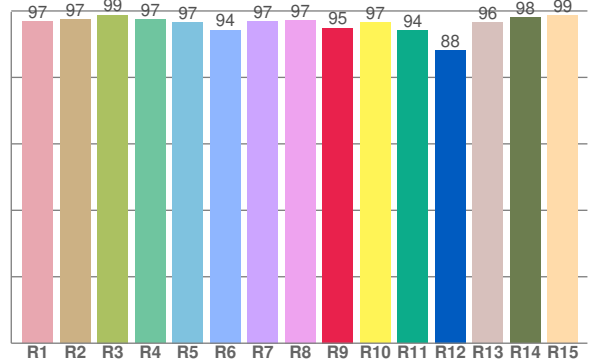
SW24-6.0\_DRY\_27



**TM30: 94.3**



**CRI: 97.0 (R1-R8)**



CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
96.8	97.5	98.8	97.3	96.7	94.3	97.0	97.3	94.9	96.5	94.2	88.2	96.5	98.1	98.6

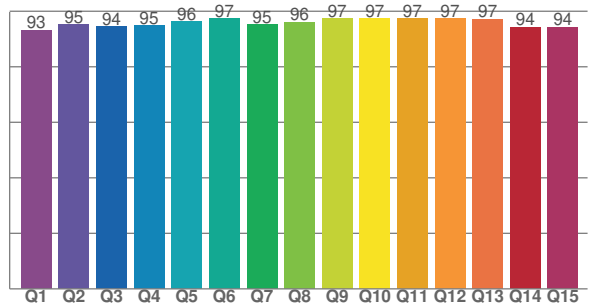
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
95.7	97.3	96.2	94.0	95.9	95.9	95.8	97.1	94.1	93.2	93.1	91.5	92.5	92.3	93.5	90.6

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
93.2	95.2	94.5	94.9	96.2	97.3	95.1	96.0	97.4	97.3	97.4	97.4	97.2	94.3	94.4

**CQS: 95.4**



## Color parameters

Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color diviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
2697 K	97.0	94.9	94.3	101.0	95.4	0.457	0.405	0.263	0.350	-0.0019



# TM30 Details

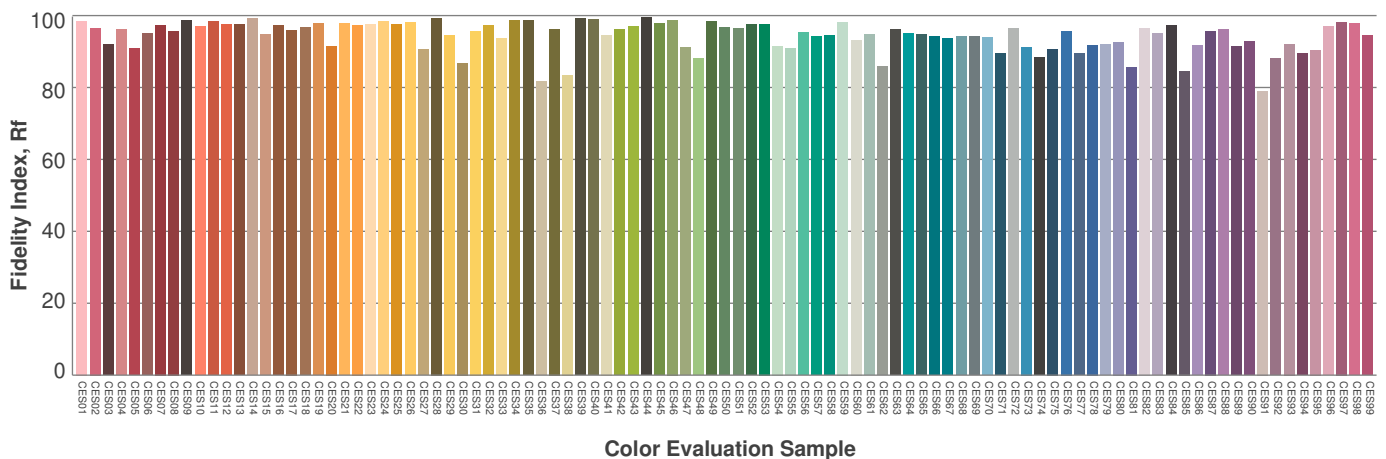
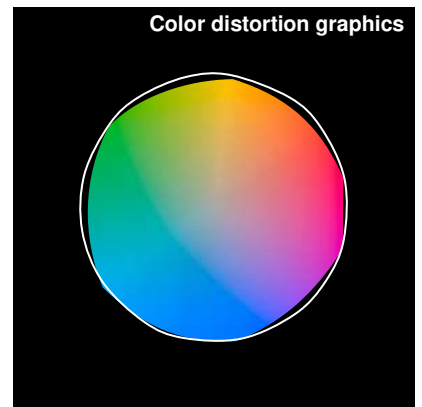
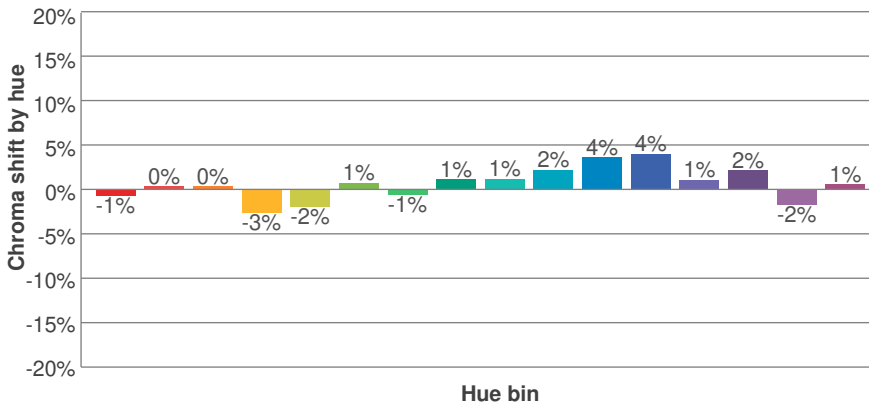
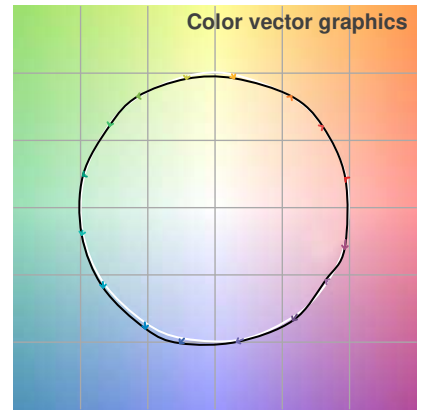
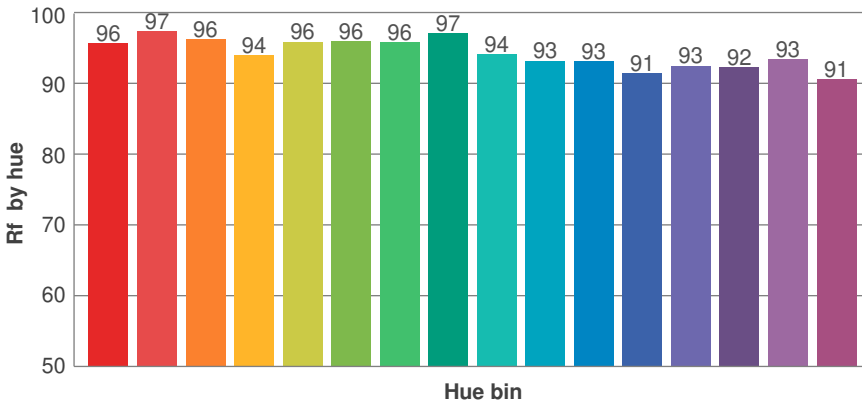
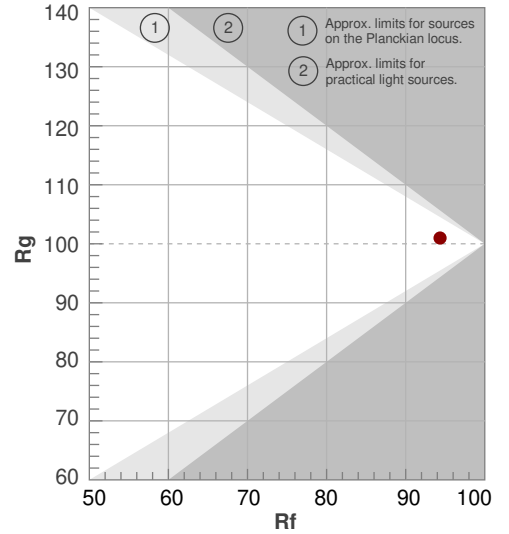
SW24-6.0\_DRY\_27



**Rf 94.3**  
Fidelity index Rf

**Rg 101.0**  
Gammut index Rg

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	96	-1%	1%
2	97	0%	0%
3	96	0%	0%
4	94	-3%	-2%
5	96	-2%	1%
6	96	1%	2%
7	96	-1%	2%
8	97	1%	1%
9	94	1%	3%
10	93	2%	4%
11	93	4%	3%
12	91	4%	-2%
13	93	1%	-5%
14	92	2%	-5%
15	93	-2%	0%
16	91	1%	-6%



# Photometric Details

SW24-6.0\_DRY\_30



**Product name:**  
SW24-6.0\_DRY\_30

**Date:**  
2/22/2018

**Powering product:**  
IQ-PH-80-120/24

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**Output:** 484 lm/ft

**Peak:** 148 cd

**Power:** 6.1 W/ft

**PF:** 1.0



### Light efficiency:



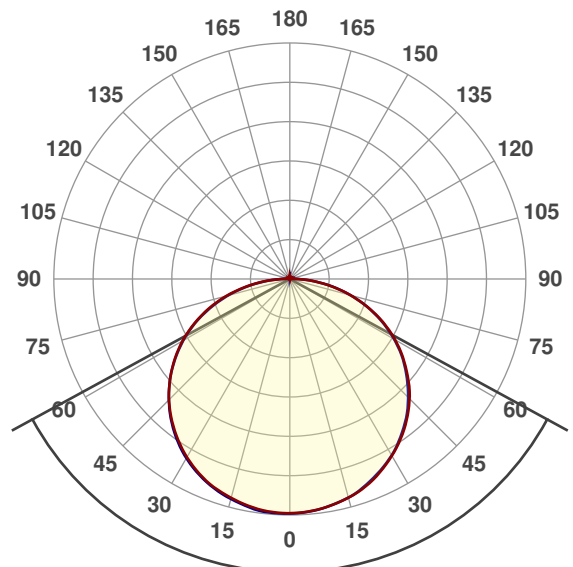
### Light quality:



### Color temperature:



### Beam Angle

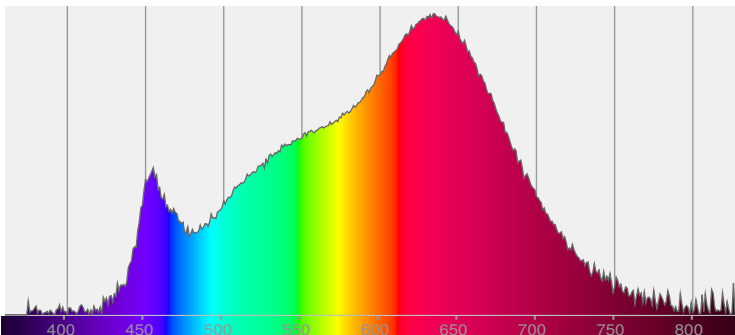


122.8°

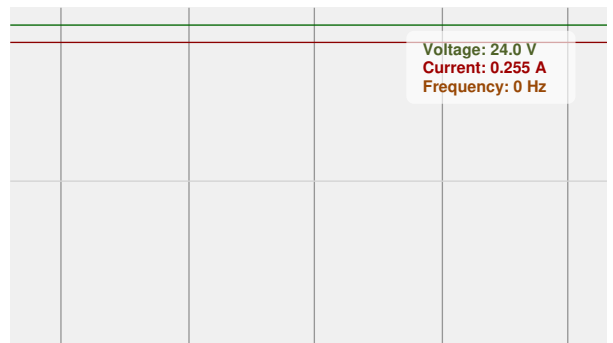


CIE 1931  
x: 0.434  
y: 0.397

### Spectra

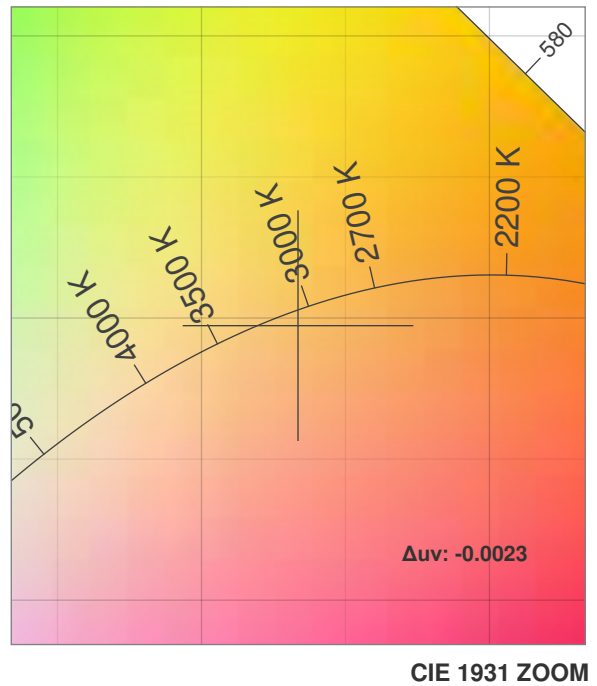
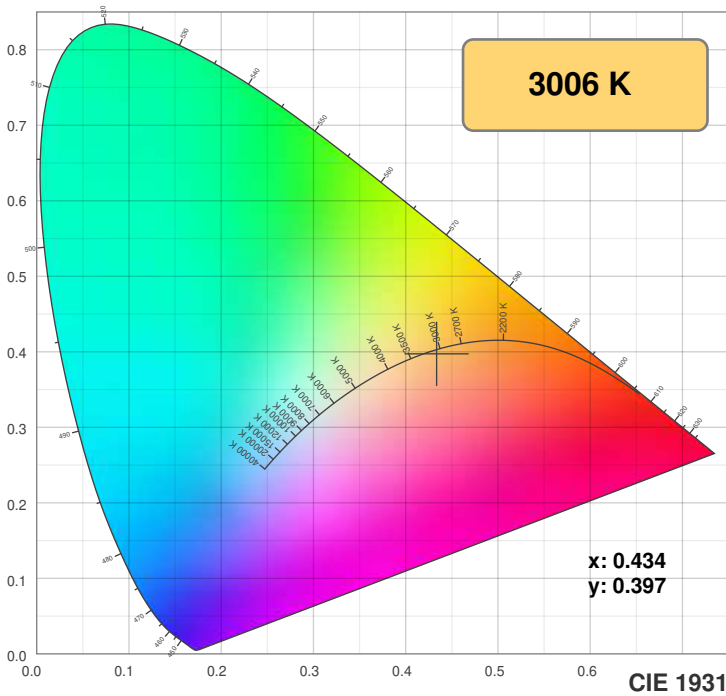


### Power

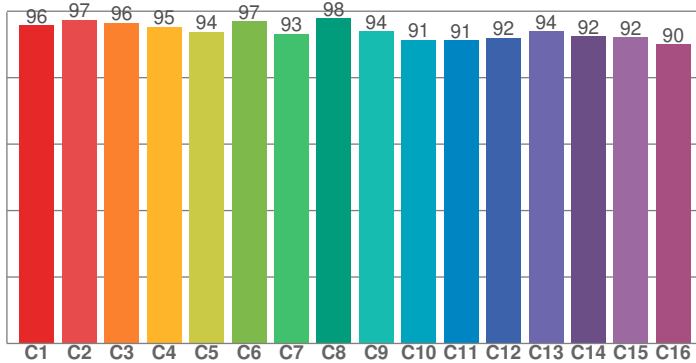


# Color Details

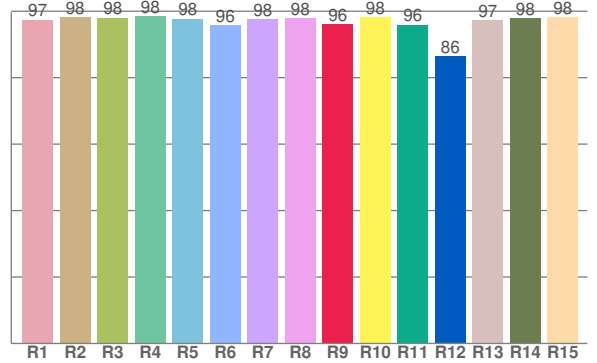
SW24-6.0\_DRY\_30



**TM30: 94.1**



**CRI: 97.6 (R1-R8)**



CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
97.4	98.2	98.1	98.4	97.7	95.8	97.6	97.9	96.1	98.2	95.9	86.5	97.3	97.8	98.3

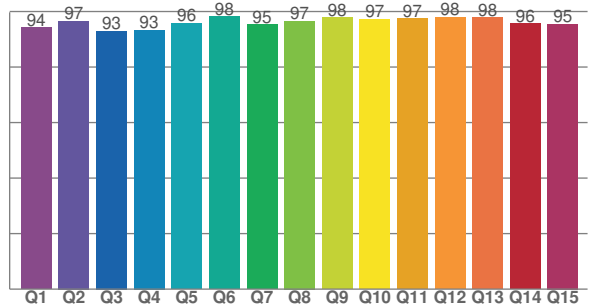
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
95.8	97.4	96.5	95.3	93.8	96.9	93.3	97.8	93.9	91.5	91.2	92.0	94.0	92.4	92.1	90.0

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
94.2	96.6	92.9	93.3	95.8	98.2	95.2	96.5	97.7	97.2	97.5	97.9	97.8	95.6	95.5

**CQS: 95.6**



## Color parameters

Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
3006 K	97.6	96.1	94.1	101.0	95.6	0.434	0.397	0.251	0.345	-0.0023

# TM30 Details

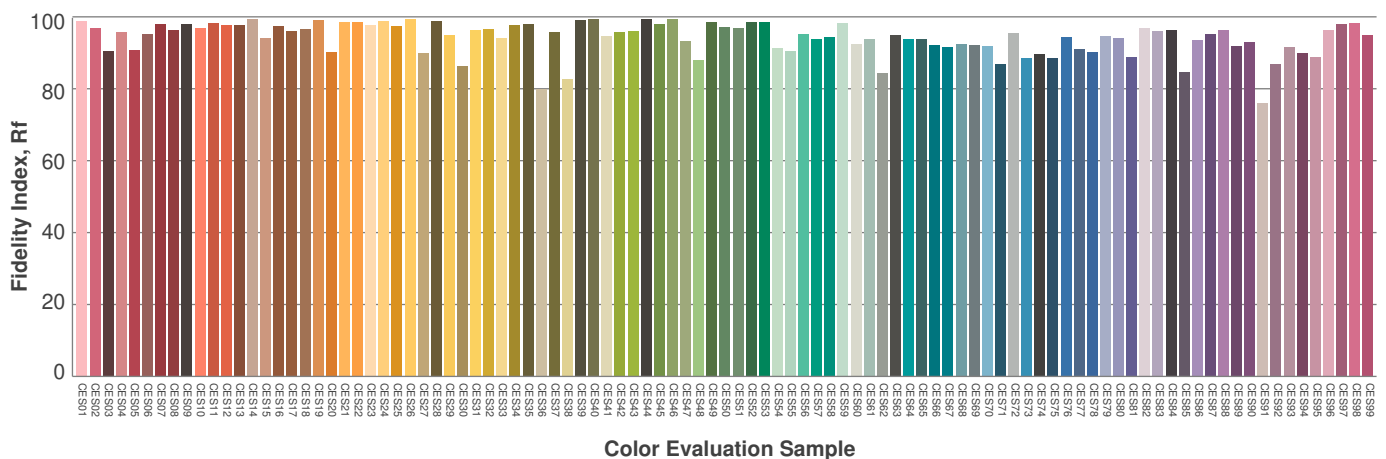
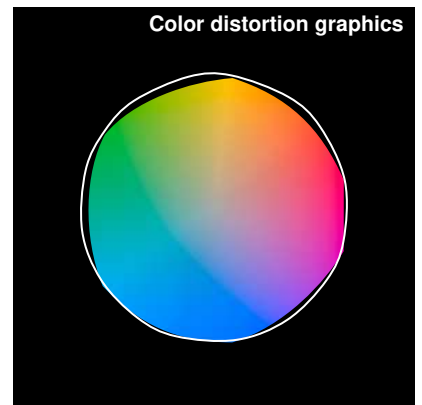
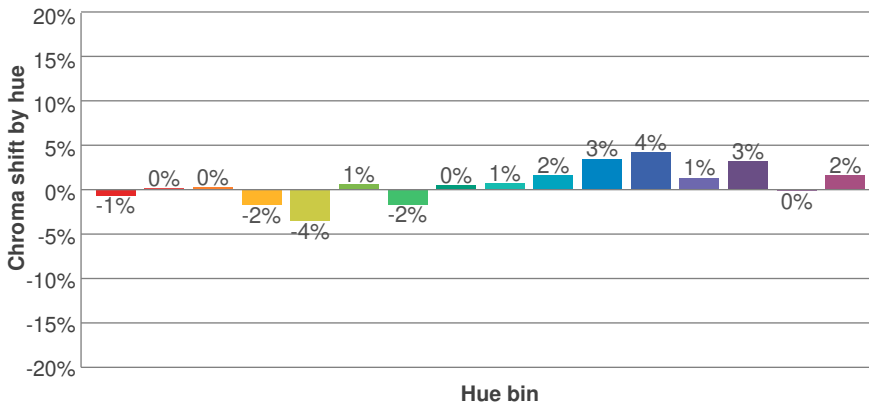
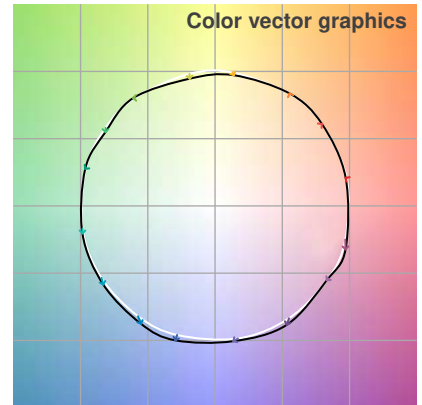
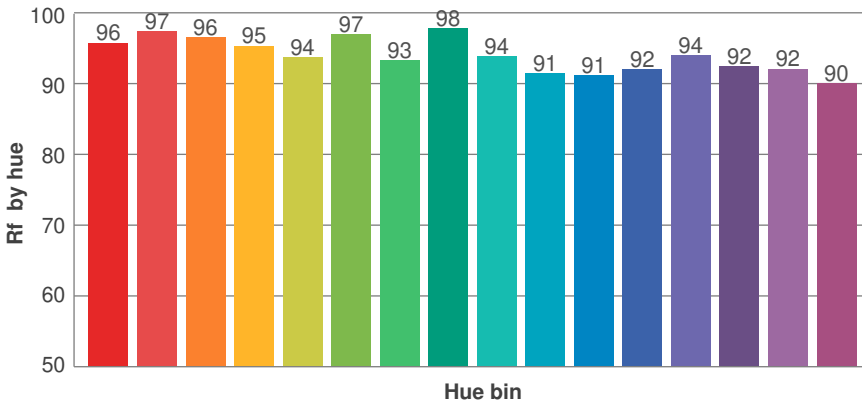
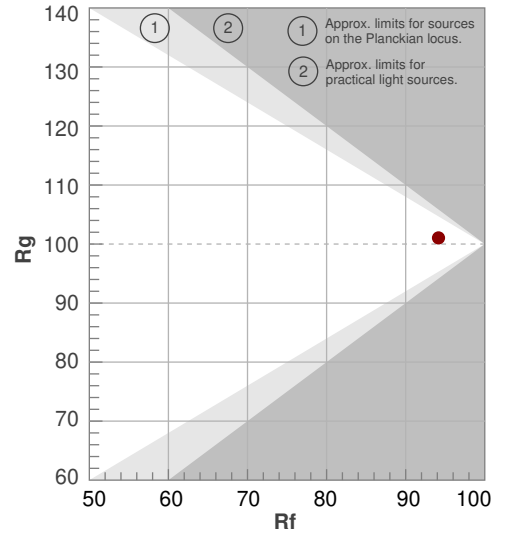
SW24-6.0\_DRY\_30



**Rf 94.1**  
Fidelity index Rf

**Rg 101.0**  
Gammut index Rg

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	96	-1%	1%
2	97	0%	0%
3	96	0%	0%
4	95	-2%	-1%
5	94	-4%	0%
6	97	1%	1%
7	93	-2%	3%
8	98	0%	1%
9	94	1%	3%
10	91	2%	5%
11	91	3%	5%
12	92	4%	-1%
13	94	1%	-4%
14	92	3%	-4%
15	92	0%	-2%
16	90	2%	-7%



# Photometric Details

SW24-6.0\_DRY\_35



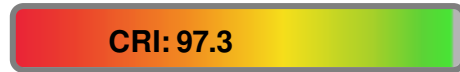
<b>Product name:</b> SW24-6.0_DRY_35	
<b>Date:</b> 10/12/2018	
<b>Powering product:</b> IQ-PH-80-120/24	
<hr/>	
<b>Output:</b>	522 lm/ft
<b>Peak:</b>	157 cd
<b>Power:</b>	6.1 W/ft
<b>PF:</b>	1.0



Light efficiency:



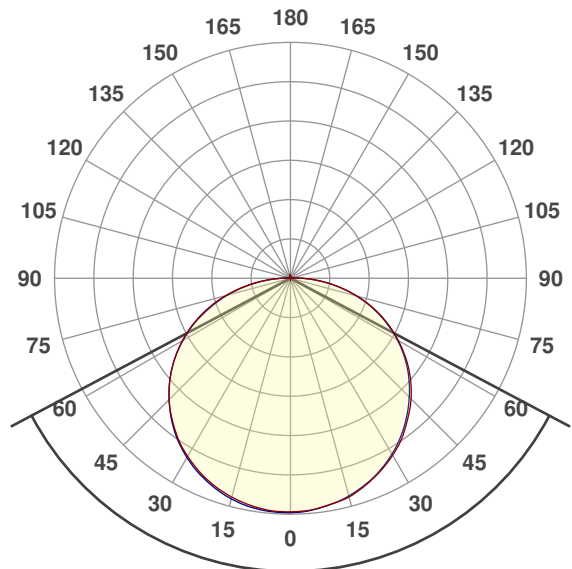
Light quality:



Color temperature:



## Beam Angle

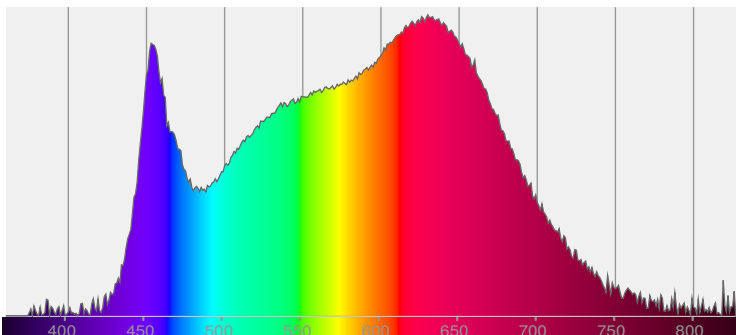


124.1°

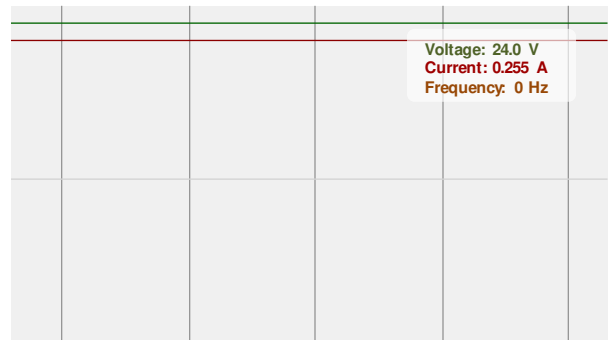


CIE 1931  
x: 0.392  
y: 0.374

## Spectra

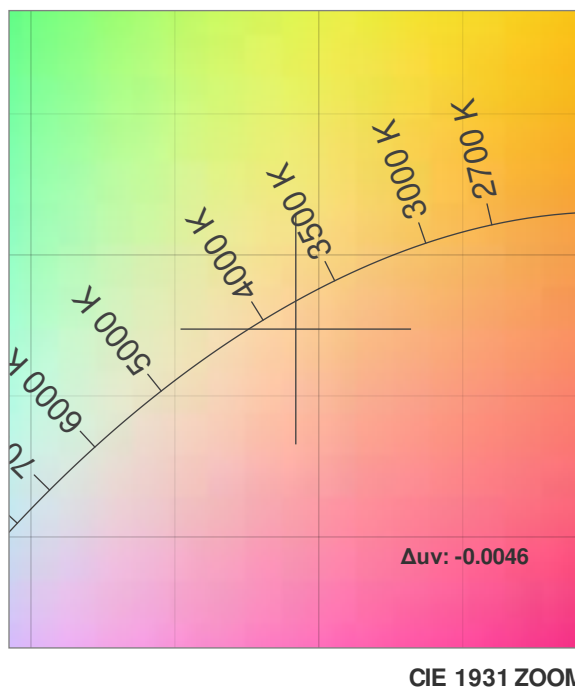
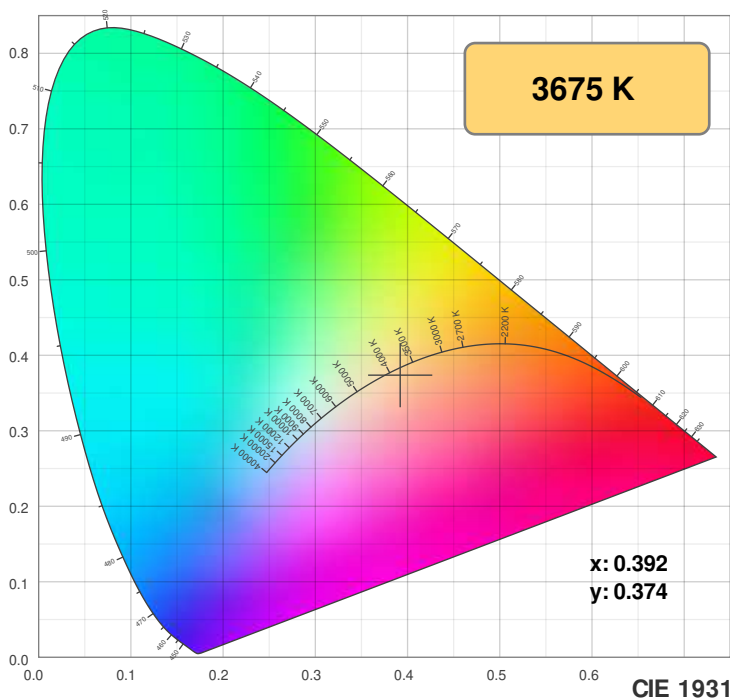


## Power

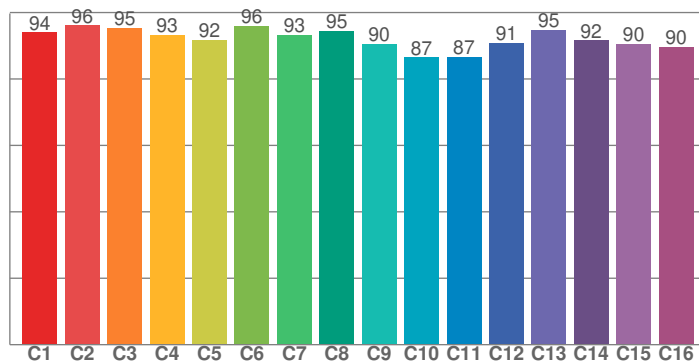


# Color Details

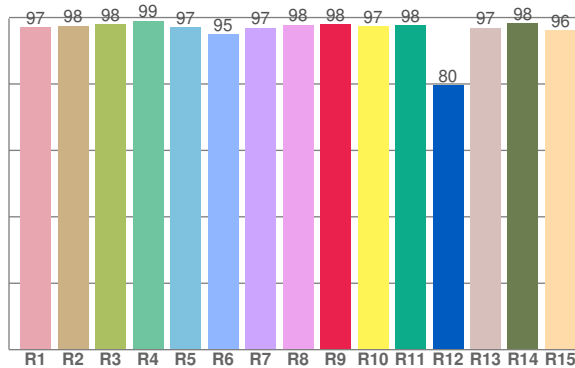
SW24-6.0\_DRY\_35



**TM30: 92.1**



**CRI: 97.3 (R1-R8)**



CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
97.0	97.5	98.1	99.0	97.1	95.1	96.9	97.8	97.9	97.5	97.7	79.5	96.9	98.2	96.1

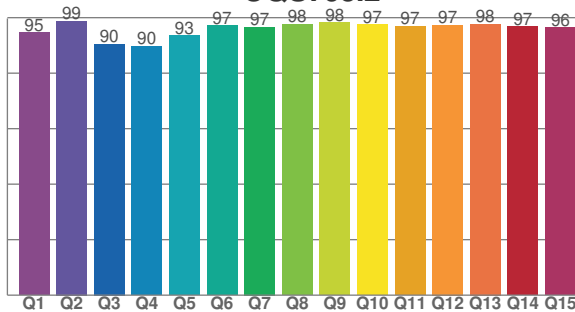
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94.0	96.1	95.4	93.3	91.7	96.0	93.2	94.5	90.5	86.6	86.7	90.9	94.8	91.6	90.5	89.6

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
94.5	98.8	90.5	89.7	93.5	97.2	96.6	97.7	98.2	97.5	96.9	97.4	97.7	96.9	96.4

**CQS: 95.2**



## Color parameters

Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	$\Delta uv$
3675 K	97.3	97.9	92.1	100.5	95.2	0.392	0.374	0.234	0.335	-0.0046

# TM30 Details

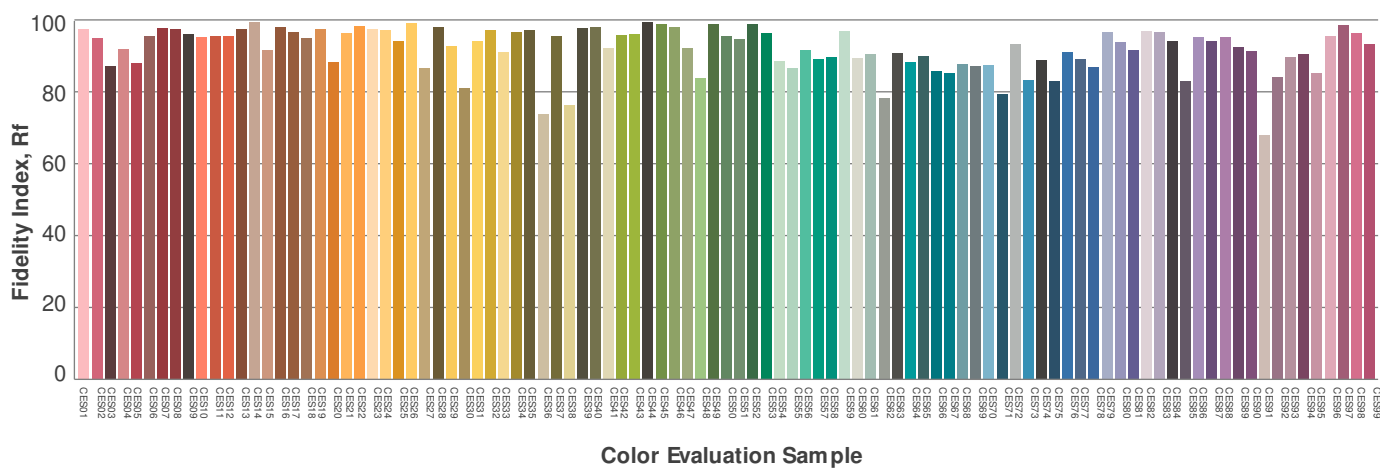
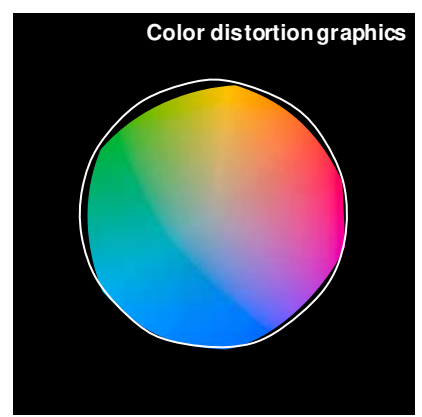
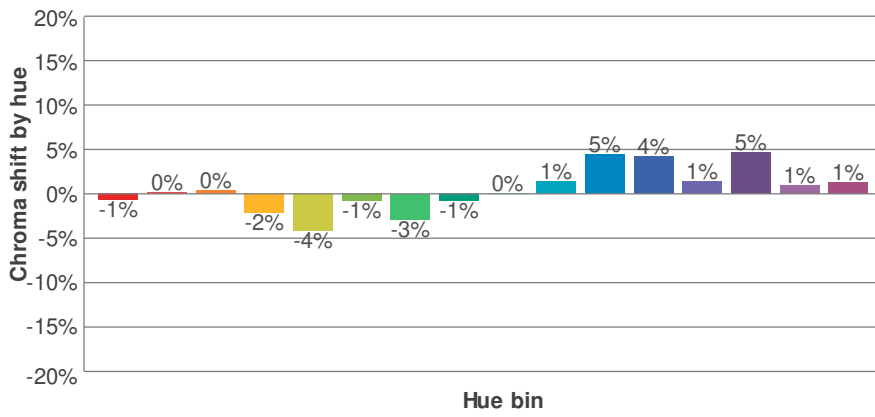
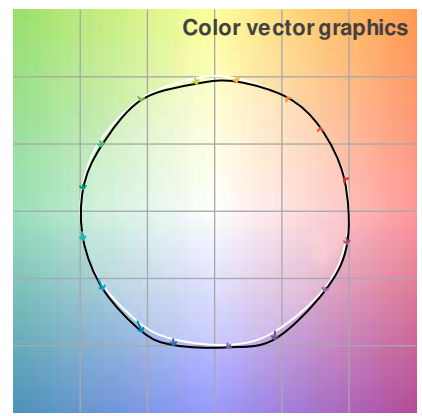
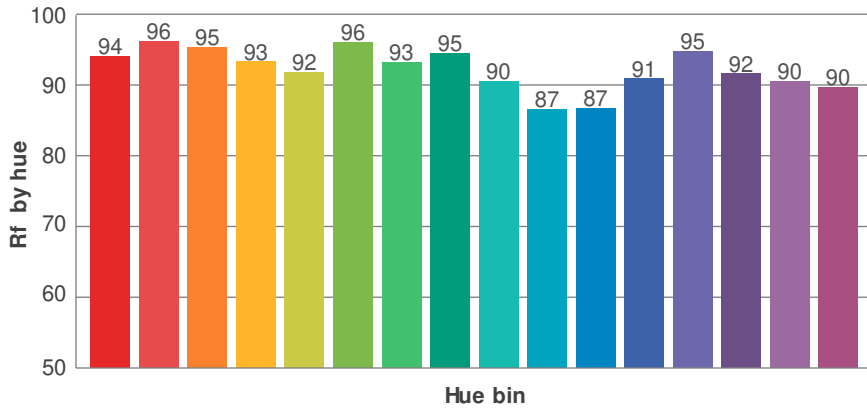
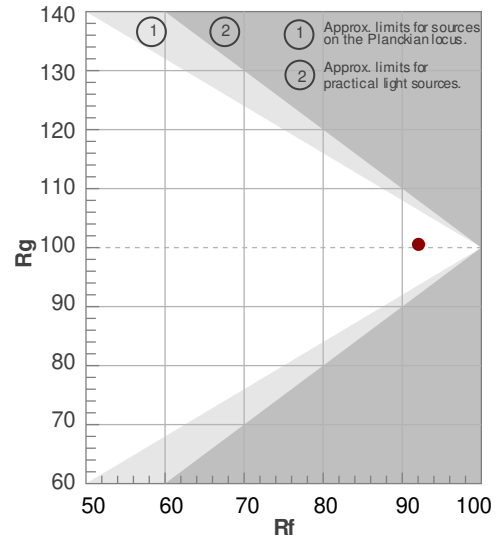
SW24-6.0\_DRY\_35



**Rf 92.1**  
Fidelity index Rf

**Rg 100.5**  
Gammut index Rg

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	94	-1%	1%
2	96	0%	0%
3	95	0%	1%
4	93	-2%	-1%
5	92	-4%	0%
6	96	-1%	1%
7	93	-3%	3%
8	95	-1%	3%
9	90	0%	6%
10	87	1%	8%
11	87	5%	7%
12	91	4%	1%
13	95	1%	-3%
14	92	5%	-3%
15	90	1%	-2%
16	90	1%	-4%



Color Evaluation Sample

# Photometric Details

SW24-6.0\_DRY\_40



<b>Product name:</b> SW24-6.0_DRY_40	
<b>Date:</b> 10/15/2018	
<b>Powering product:</b> IQ-PH-80-120/24	
<hr/>	
<b>Output:</b>	548 lm/ft
<b>Peak:</b>	164 cd
<b>Power:</b>	6.1 W/ft
<b>PF:</b>	1.0



Light efficiency:



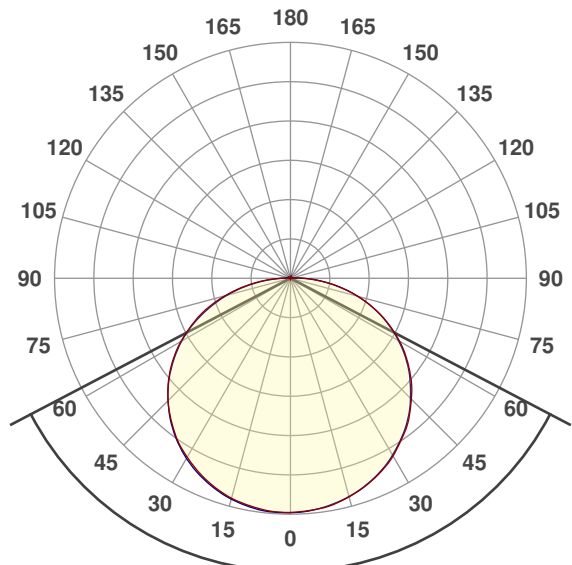
Light quality:



Color temperature:



## Beam Angle

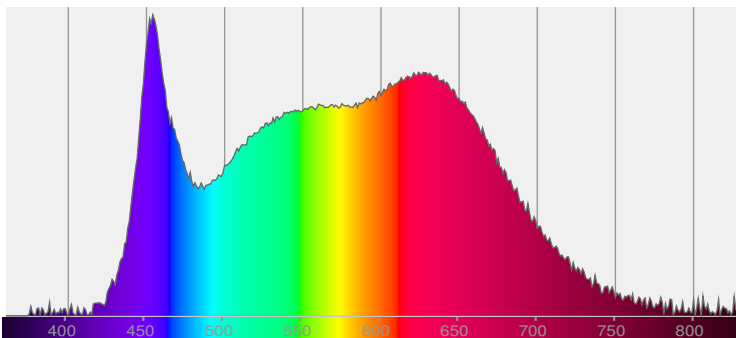


124.7°

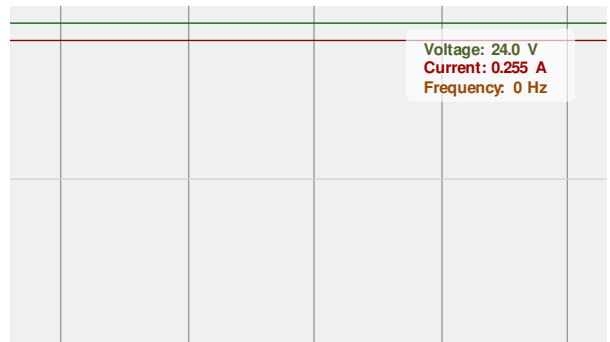


CIE 1931  
x: 0.368  
y: 0.361

## Spectra



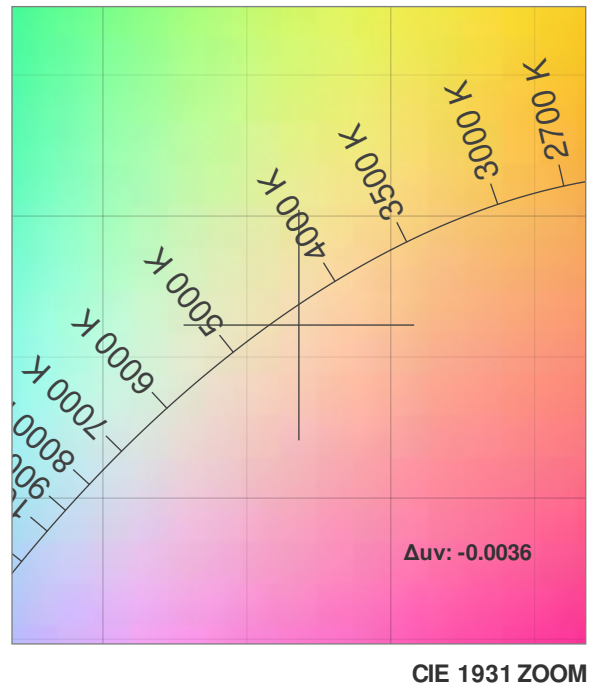
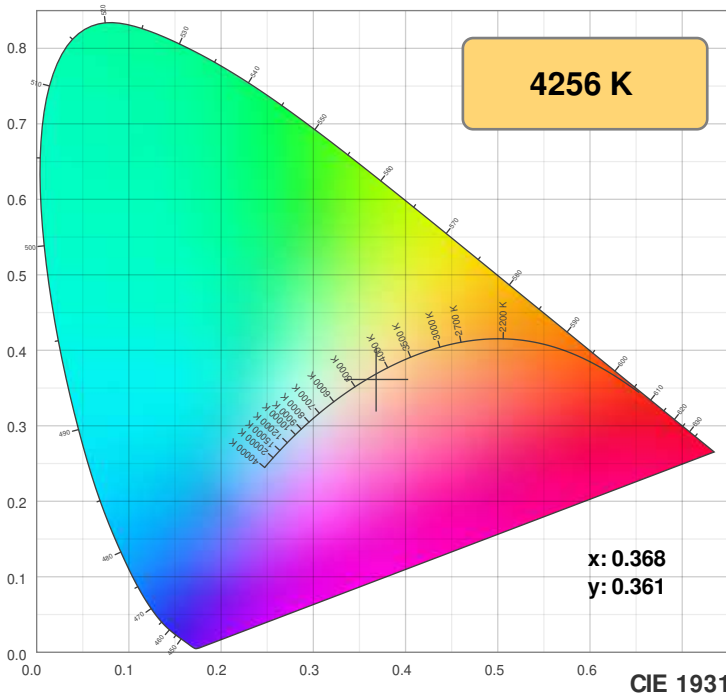
## Power



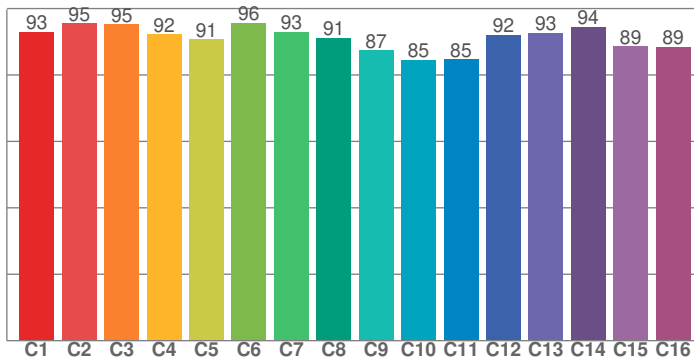


# Color Details

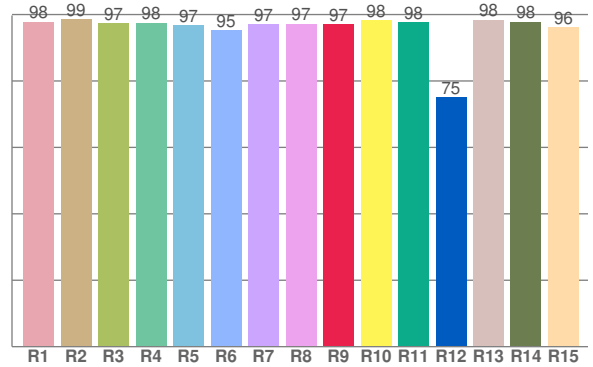
SW24-6.0\_DRY\_40



**TM30: 91.0**



**CRI: 97.2 (R1-R8)**



CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
97.8	98.7	97.3	97.6	96.8	95.2	97.0	97.2	97.2	98.3	97.7	75.2	98.4	97.8	96.3

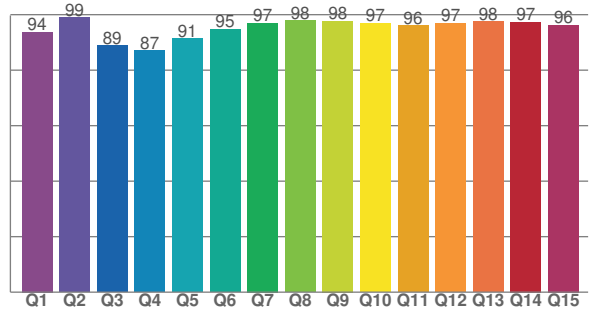
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
93.0	95.5	95.3	92.2	90.7	95.7	92.9	91.2	87.4	84.5	84.7	92.0	92.7	94.5	88.6	88.5

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
93.7	98.9	88.8	87.1	91.3	94.8	97.0	97.8	97.7	96.9	96.1	96.9	97.6	97.4	96.3

**CQS: 94.1**



## Color parameters

Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
4256 K	97.2	97.2	91.0	99.8	94.1	0.368	0.361	0.223	0.329	-0.0036

# TM30 Details

SW24-6.0\_DRY\_40



**Rf 91.0**  
Fidelity index Rf

**Rg 99.8**  
Gammut index Rg

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	93	-1%	1%
2	95	0%	0%
3	95	0%	1%
4	92	-3%	-1%
5	91	-5%	-1%
6	96	-2%	0%
7	93	-3%	2%
8	91	-2%	5%
9	87	-1%	9%
10	85	0%	8%
11	85	4%	8%
12	92	4%	2%
13	93	4%	-2%
14	94	0%	0%
15	89	2%	-4%
16	89	1%	-5%

